

Delta Operations for Salmonids and Sturgeon (DOSS) Group

Conference call: 03/01/11 at 9:00 a.m.

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon.

DOSS will coordinate the work of other technical teams. DOSS notes and advice can be found at: <http://swr.nmfs.noaa.gov/ocap/htm>

DWR: Andy Chu, Mike Ford, Angela Llaban

FWS: Nick Hindman, Roger Guinee

NMFS: Barbara Rocco, Bruce Oppenheim, Barb Byrne, Jeff Stuart, Garwin Yip

DFG: Dan Kratville,

Reclamation: John Hannon,

SWRCB: Ann Snyder, Kari Kyler,

EPA: not present

Agenda

- 1) Fish monitoring
- 2) Water project operations
- 3) OMR flows
- 4) Georgiana Slough non-physical barrier update

Fish Monitoring: The following table presents the fish monitoring data from 2/22–2/28/11.

Location	Chippis Is. Midwater Trawl	Sacramento Kodiak Trawl	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST	Moulton Weir RST	Deer/Mill Creeks RST
Sample Date	2/22, 2/23, 2/25	2/22, 2/23, 2/25	2/22, 2/23, 2/25	2/22, 2/23, 2/24	2/22– 2/28	2/22, 2/23, 2/25, 2/26, 2/28	2/22, 2/23, 2/25, 2/26, 2/28	
Total Catch	25	76	0	485	665	949	901	No data
FR	0	56		436	619	881	865	
LFR	0	0		0	0	0	0	
WR	1	3		2	2	1	5	
SR	0	13		46	44	61	26	
(Ad-clips)	0	1		0	0	2	2	
DS	7	0		0	0	0	0	
LFS	1	0		0	0	0	0	
SPTL	1	0		0	0	0	0	
SH(ad-clip)	15	3		1	0	4	3	
SH (wild)	0	0		0	0	0	0	
Water Temp. (°F)	49.3	46.4		48.6	49.3	48.2	48.28	
Flows (cfs)					12,900	11,700	11,272	
Turbidity (NTU)					19.3	16.4	8.09	

FR/SR CPUE					38.4	63.8	55.6	
WR/LFR CPUE					0.13	0.10	0.24	

Key: FR = Fall run; LFR = Late-fall run; SR = Spring run; WR = Winter run; SH = Steelhead; DS = Delta smelt; LFS = Longfin smelt; SPTL = Splittail. Water temperature, flows and turbidity averaged for the week, CPUE = catch per unit effort

Moulton Weir: There were some large pulse flows as a result of recent storm events. The CPUE shifted up to 104, down to about 12.0, and then back up to about 53.0 by the end of the reporting period. A few winter-run Chinook still showing up.

Tisdale Weir: The pulse flows were not quite the same as those of Moulton. Average turbidity was higher; however, total catch was similar. Many more spring-run Chinook were caught at Tisdale than at Moulton or Knights Landing, the most being caught on 2/22 and 2/23.

Knights Landing: Average CPUE was lower than that at Tisdale or Moulton. Average flows were a bit higher but catch was lower than at either Tisdale or Moulton.

It appears overall that the winter-run Chinook are now very near or in the Delta (2 in beach seines were caught at Koket and Sandy Beach), however, only one was observed leaving the Delta in the Chippis Island trawl. No data were available for Deer and Mill Creeks.

Delta Salvage data (from 2/20–2/27/11) For additional info:

<http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm>

Chinook:

CVP: There were 39 non-clipped fall-run salvaged for a loss of 28; 100 non-clipped winter-run salvaged for a loss of 79.

SWP: There were 185 non-clipped winter-run salvaged for a loss of 813, and 12 clipped winter-run salvaged for a loss of 54.

Cumulative YTD totals: Combined CVP/SWP loss of non-clipped winter-run Chinook is 2,086, which represents about 1/3 of the incidental take limit (6,640).

Steelhead:

CVP: There were 79 clipped and 39 non-clipped steelhead salvaged in February.

SWP: There were 241 clipped and 100 non-clipped steelhead salvaged in February.

Cumulative YTD total: Combined CVP/SWP salvage is 447 clipped, and 159 non-clipped (wild) steelhead, or 5.35 percent of the incidental take limit (3,000 combined for CVP/SWP).

Delta smelt:

CVP: 4 were salvaged on February 24.

SWP: none were salvaged

Longfin smelt and green sturgeon:

None were salvaged at either facility in February.

Splittail:

SWP: 50 were salvaged from 2/22 to 2/27/11;

CVP: None salvaged.

Older juvenile Chinook loss and loss density:

SWP & CVP OLDER JUVENILE* CHINOOK LOSS & LOSS DENSITY 02/21/2011 through 02/28/2011

Date	OLDER JUVENILE LOSS** (# fish)			Combined Older Juvenile Loss Density (fish/TAF)
	SWP	CVP	Combined	
02/21/2011	177.66	15.95	193.61	9.69
02/22/2011	173.62	19.14	192.76	11.03
02/23/2011	70.83	19.14	89.97	5.17
02/24/2011	151.91	12.76	164.67	9.90
02/25/2011	105.11	0.00	105.11	6.48
02/26/2011	17.38	2.88	20.26	1.22
02/27/2011	0.00	5.76	5.76	0.34
02/28/2011	129.9	5.44	135.34	7.88

DWR-DES 2/28/2011

Preliminary, subject to revision

*Older juveniles defined as all Chinook above the minimum winter-run length (Delta Model)

**Loss data obtained from DFG, Stockton

Note: The data for 2/28/11 are estimates based on calculations. As of this meeting, the data for 2/28/11 have not been confirmed; however, DOSS does not anticipate a significant difference between the calculated and real data and will provide advice to WOMT and NMFS based on this information. It is our experience that the estimates are relatively close (within 0.10%) to the confirmed data provided by DFG.

Hatchery coded wire tags (DWR report): There was no update from 2 weeks ago regarding streamlining the timing of reporting the data from the tags. The loss numbers do not appear to have changed.

Spring-run surrogate loss rate

Projected loss estimates

December 21 release: 0.126%

0.131%

January 14 releases: 0.037%

0.038%

The current loss rate for spring-run surrogates is below the 0.5% trigger in the NMFS opinion. There were eight fish that have not yet been identified; fork length ranged from 152 to 204 mm. Jonathan Speegle, FWS, has been notified to provide an update on these numbers.

Smelt working group (SWG) update: The SWG group met on 2/28/11; no recommendations were made because the OMR flows required from implementation of the NMFS opinion were adequately protective for smelt. Larval analysis shows a large proportion of Pacific herring caught in the trawls; it is difficult to differentiate these from longfin smelt larva. The #4 larval survey is currently in the field and the spring Kodiak trawl will begin on 3/7/11. Eleven of the 12 stations have picked up longfin smelt larvae; however, this did not trigger an action in the DFG permit due to the high flows (>8,000 cfs) on the San Joaquin River.

According to a recent settlement in the Delta smelt lawsuit, the SWG group can now make a recommendation on flows within a new OMR flow range of -1,250 to -6,100 cfs. There is also a requirement for a new stakeholders technical team (Delta Conditions Team) that will meet before the SWG on Monday morning and will make recommendations to the SWG.

Georgiana Slough barrier update: DWR is scheduled to construct and place a 400-foot non-physical barrier in the slough this week to monitor 1,500 acoustically tagged late-fall-run Chinook that will be released every 3 hours over a 45-day period beginning 3/7/11. The barrier will be turned off every 25 hours to coincide with the tidal cycle. Data should provide information on survival and predation in the area. It should also provide information on whether the smolts will travel under the barrier. The barrier will be removed in May.

Operations:

SWP		CVP	
Flows/Exports (cfs)			
Clifton Court Forebay (CCF)	5,000	Jones Pumping Plant	3,500
Outflow	44,000	American R- Nimbus	2,500
Total Delta Inflow	49,650	Sacramento R-Keswick	3,900
		Stanislaus R- Goodwin	200
Feather R- Oroville	1,750	Merced R	
Sacramento R at Freeport	35,534	Mokelumne R	
San Joaquin R at Vernalis	11,958	Tuolumne R	
OMR (daily)			
OMR 5 day	-2,148		
OMR 14 day	-3,387		
Reservoir Storage (TAF)			
San Luis	1,035	San Luis	971
Shasta	3,784		
Folsom	613		
New Melones			
Oroville	2,684		
Delta Operations			
DCC	closed	E/I (%)	20
Outflow Index (cfs)	44,300	X2 (km)	58.4
Water Temperature (°F)	49.3		

Weather forecast: Another series of storm events will be coming this week; however, it will be a warmer series of storms and snow elevation will be higher. Most of northern California will get rain rather than snow.

OMR flows: The projects continue to operate at an OMR flow of no more negative than -2,500 cfs from 2/22/11 through today, 3/1/11. The five day minimum ended on 2/26, but the 9.9 fish/TAF on 2/24 required the projects to maintain OMR at no more negative than -2,500 until 2/27. As a result of combined fish densities being between 3.32 and 6.64 fish/TAF on 2/25, 2/26, and 2/27, the OMR flow could be relaxed to no more negative than -3,500 cfs.

There was a discussion among the DOSS members to clarify that the transition period during which the flows change takes 2 days to implement and also to advise that members of the group acknowledged that an energy purchase and demand has an effect on the transition period as well, although it should never exceed 2 days. The purchases must be scheduled according to the market demands; DWR will purchase energy 2 days in advance in anticipation of demand. The group also acknowledged that the effect on Chinook and the Opinion directive takes priority over energy already purchased and stored. Therefore, DWR/the projects planned to operate at OMR no more negative than -3,500 cfs (CCF inflow of 6,000 cfs) beginning tomorrow, 3/2/11.

On 2/28/11, the calculated loss estimated showed a loss density of 7.88 fish/TAF, which was above the second stage trigger; therefore, it resets to the lower (less negative) OMR flows. DWR proposed to reduce OMR flows back to -2,500 cfs (CCF inflow of 4,500 cfs) on Thursday, 3/3/11 to initiate a new second stage trigger action response for a minimum 5 consecutive days.

Another proposed operation was to keep the OMR flow at no more negative than -2,500 cfs until 3 consecutive days of combined fish density less than 6.64 fish/TAF is met, and not relax the OMR flow to -3500 cfs for one day on Wednesday, 3/3/11. This would be more practical to manage to since it is difficult to manage to daily OMR flow changes (*i.e.*, reason the projects use 5-day and 14-day averages). However, due to the power costs involved in changing already scheduled operations, DOSS agreed with DWR's proposed operations.

DOSS advice to WOMT and NMFS: DOSS' advice to WOMT and NMFS was to operate to an OMR of no more negative than -2,500 cfs on 3/1/11, operate to an OMR of no more negative than -3,500 cfs on 3/2/11, and on 3/3/11, implement the action response for the second stage trigger, that is, operate to an OMR of no more negative than -2,500 cfs for a minimum of 5 consecutive days. If the juvenile loss density does not exceed the 2nd trigger of 6.64 fish/TAF for the 3 consecutive days ending 3/7/11, the action response for the second stage trigger will be met. See also attached NMFS Determination dated 3/1/11.

Other business:

Real-time data: DWR (Chu) continues to work on scheduling meetings with the fish facilities to discuss streamlining reporting the real-time data. DWR will keep the DOSS group apprised on progress.

Next Meeting: Conference call, 3/8/11, 9:00 a.m.